

B1
cont.

composition and the underprinted fixer fluid together form an amorphous, viscous fluid on the medium, the mixture being an amorphous viscous fluid, having a viscosity greater than the ink;

and wherein the at least one cationic component comprises a cationic polyelectrolyte selected from the group consisting of $R_1R_2R_3R_4N^+$; $R_1R_2R_3R_4P^+$ and $R_1R_2R_3R_4As^+$, where R can be H, alkyl or other organic substituent;

and wherein the cationic polyelectrolyte is in solution with non-polymeric cations selected from the group consisting of calcium ions, aluminum ions, barium ions, strontium ions, zinc ions, magnesium ions and titanium ions.

B2

21. (amended) The ink-jet ink composition of Claim 17, wherein the polymer comprises styrene.

S (11)

22. (amended) The ink-jet ink composition of Claim 17, wherein the anionic binder comprises hydrolyzed styrene maleic anhydride.

B3

24. (amended) The ink-jet ink compositions of Claim 23, wherein the at least one dye having anionic functional groups is selected from the group consisting of sulfonated dyes with non-polar groups, dyes with protonatable groups, dyes with carboxylate groups and dyes with phosphonate groups.

B 4

27. (amended) An underprinting fixer fluid comprising:

at least one cationic component,

wherein the at least one cationic component comprises a cationic polyelectrolyte selected from the group consisting of $R_1R_2R_3R_4N^+$; $R_1R_2R_3R_4P^+$ and $R_1R_2R_3R_4As^+$, where R can be H, alkyl or other organic substituent;

and wherein the cationic polyelectrolyte is in solution with non-polymeric cations selected from the group consisting of calcium ions, aluminum ions, barium ions, strontium ions, zinc ions, magnesium ions and titanium ions;

B4
cont.
SIM
C1

and wherein, when an ink-jet ink composition comprising at least one dye and at least one anionic binder is printed on a portion of a medium underprinted with the fixer fluid, the ink composition and the fixer fluid together form an amorphous viscous fluid, the viscous fluid having a viscosity greater than the ink; and wherein the at least one anionic binder comprises a polymer having at least one complexing group selected from the group consisting of Ethylene Diamine Tetracetic Acid, Acetyl Acetonate, Maleic Anhydride, Acrylate and combinations thereof.

B5

30. (amended) The underprinting fixer fluid of claim 27, wherein the cationic polyelectrolyte comprises at least one branched polymer chain.

B4

32. (amended) The underprinting fixer fluid of Claim 27, wherein the cationic polyelectrolyte is a tetrasubstituted ammonium salt.

Please add new claims 50-57 as follows:

B7

50. (new) The underprinting fixer fluid of Claim 27, wherein the polymer comprises styrene.

SIM

51. (new) The underprinting fixer fluid of Claim 27, wherein the anionic binder comprises hydrolyzed styrene maleic anhydride.

SIM

52. (new) The underprinting fixer fluid of Claim 27, wherein the at least one dye comprises anionic functional groups.

SIM

53. (new) The underprinting fixer fluid of Claim 52, wherein the at least one dye having anionic functional groups is selected from the group consisting of sulfonated dyes with non-polar groups, dyes with protonatable groups, dyes with carboxylate groups and dyes with phosphonate groups.

54. (new) The underprinting fixer fluid of Claim 27, wherein the ink composition further comprises low-molecular weight hydrophilic compounds.